

IN THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claims 1 to 10 (canceled).

Claim 11 (currently amended): A rotary element of a printing press comprising:

an encoder for generating a periodic first signal in response to rotation of the rotary element; and

an evaluation unit linked to the encoder having:

a first synthesizer for generating a second signal having a resolution ratio, a frequency ratio, and a phase relation to the first signal,

a control interface for data exchange coupled to the first synthesizer for setting at least one of the resolution ratio, the frequency ratio and the phase relation of the first signal to the second signal based on data input by a user and transmitted to the first synthesizer, and

a further synthesizer coupled to the control interface for generating a further signal, the further signal having a further resolution ratio, a further frequency ratio, and a further phase relation to the first signal, at least one of the further resolution ratio or the further frequency ratio or the further phase relation of the further signal being different from the resolution ratio, frequency ratio or phase relation, respectively, of the second signal,

the second signal and the further signal being mutually independent from one another,

the control interface for data exchange setting at least one of the one of the resolution ratio, the frequency ratio and the phase relation of the first signal to the further signal based on data input by a user and transmitted to the further synthesizer.

Claim 12 (canceled).

Claim 13 (previously presented): The rotary element as recited in claim 11 wherein the evaluation unit includes at least one output interface, the output interface outputting the second signal for driving a clock-pulse-controlled device.

Claim 14 (previously presented): The rotary element as recited in claim 11 wherein a resolution of the second signal is smaller than a resolution of the first signal.

Claim 15 (previously presented): The rotary element as recited in claim 11 wherein the evaluation unit includes at least one divider device connected upstream of the synthesizer for reducing a resolution of the first signal in a decoded state.

Claim 16 (previously presented): The rotary element as recited in claim 11 wherein the first and the second signals each are a sequence of signal pulses, a sequence of digital values, or a variable analog value.

Claim 17 (previously presented): The rotary element as recited in claim 11 wherein the rotary element is a shaft, a cylinder, a roller, a reel, a cylinder journal, or a gear wheel.

Claim 18 (canceled).

Claim 19 (previously presented): A folding apparatus of a rotary offset press comprising at least one rotary element as recited in claim 11.

Claim 20 (previously presented): An offset press comprising at least one rotary element as recited in claim 11.

Claim 21 (previously presented): The rotary element as recited in claim 11 wherein the second signal and the further signal each have a resolution, frequency and phase different from the first signal.